

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Original) An apparatus, comprising,
a substrate having a planar surface
first and second electrodes located on said planar surface, said first electrode having a top surface and a lateral surface, said lateral surface having an edge near or in contact with said substrate;
an electrode insulating layer located on said top surface;
a self-assembled layer located on said lateral surface; and
wherein said second electrode is in contact with both said self-assembled layer and said electrode insulating layer.
2. (Original) The apparatus of claim 1, wherein said self-assembled layer comprises a stack of at least two self-assembled layers.
3. (Original) The apparatus of Claim 2, wherein said stack of self-assembled layers comprises an end group of a first organic molecule in a first self-assembled layer chemically coupled to an end group of a second organic molecule in a second self-assembled layer.

4. (Original) The apparatus of Claim 3, wherein said coupling between said end groups of said first and second organic molecules includes a copper bridge.

5. (Original) The apparatus of Claim 1, wherein said self-assembled layer comprises non-conductive organic molecules.

6. (Original) The apparatus of Claim 1, wherein said self-assembled layer comprises semiconductive organic molecules.

7. (Original) The apparatus of Claim 1, wherein said self-assembled layer is covalently bonded to said lateral surface.

8. (Original) The apparatus of Claim 1, wherein said self-assembled layer comprises a channel and said apparatus comprises an organic field effect transistor, wherein said channel has a charge mobility of at least about $1 \times 10^{-3} \text{ V}^{-1} \text{ s}^{-1}$.

9. (Original) The apparatus of Claim 1, wherein a footprint of said electrode insulating layer is substantially aligned with said top surface.

Claims 10-20 (Canceled)